

ZOOGEOGRAPHIC AND SYSTEMATIC NOTES ON THE
LACE BUG TRIBE LITADEINI, WITH THE DESCRIPTION
OF THE NEW GENUS *STRAGULOTINGIS*
(HEMIPTERA: TINGIDAE)

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The tribe Litadeini was proposed for the genus *Litadea* by Drake and Ruhoff (1965a, p. 18) and defined by the unusual modification of the second tarsal segment: "Enormously swollen, nearly ovate in outline, upper surface convex, beneath deeply concave, the concavity filled with short, bristlelike hairs." Subsequently these two authors (1965b, p. 247) transferred *Holophygdon* Kirkaldy (1908, p. 364) from Tingini to Litadeini and described another genus, *Aeopelys*, as a member of Litadeini.

During preparation of a key to the genera of Tingidae of the world, it was found that on the basis of the modified second tarsal segment five more genera must be transferred from the tribe Tingini to the Litadeini (new assignments here): *Aristobyrsa* Drake and Poor (1937, p. 164), *Larotingis* Drake (1960, p. 357), *Oecharis* Drake and Ruhoff (1965b, p. 280), *Ogygotingis* Drake (1948, p. 149), and *Psilobyrsa* Drake and Hambleton (1935, p. 148). In addition, two species cataloged in the Tingini genus *Pleseobyrsa* Drake and Poor have the modified tarsi of the Litadeini but do not fit well into any of the other genera and so must have a new genus erected for them.

The tribe Litaeini originally containing but one genus and species from the Indian Ocean island of Rodriguez, now includes thirteen species in nine genera and is almost Pan-Tropical in distribution. It is known from Africa and South America, and from the islands in the Indian (Rodriguez I.) and Pacific (Fiji and New Guinea) Oceans.

In view of the several genera added to the tribe Litadeini, the significant modifications of the second tarsal segment might profitably be reviewed and slightly modified. The segment is very strongly dilated at the base so that it is abruptly much wider than the first segment. The ventral surface is flat or concave (apparently arching inward during drying) and densely hairy with the hairs toward the sides of the segment much lengthened. The shape is not always broadly oval; in *Oecharis* it is elongate oval, tapering from the wide base to the slender claw-bearing apex. The functional significance of these modifications has not been investigated by observation of the living insect in the field.

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Stragulotingis, n. gen.

Fig. 1

Diagnosis: Within the tribe Litadeini, *Stragulotingis* is recognizable by the broad, flat, horizontal paranota associated with the flat discoidal areas.

Characters: Length 3.0-3.7 mm.; macropterus.

Head short, vertically deflexed, with 5 long, cephalic spines (occipital and supraclypeal pairs plus a median one above base of

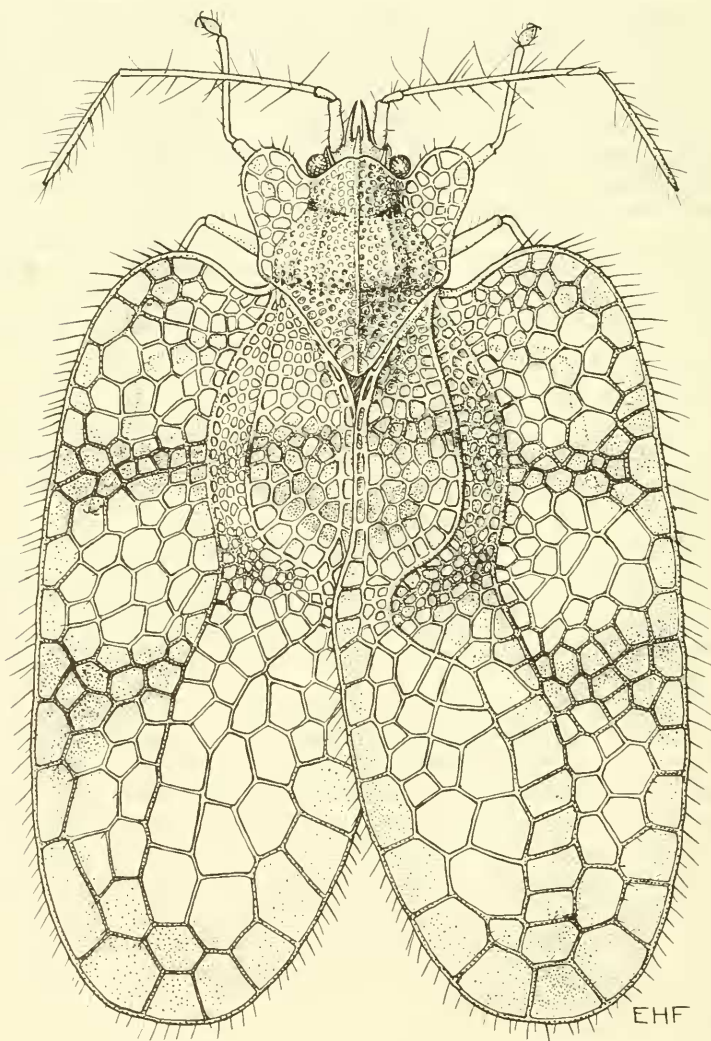


Fig. 1 *Stragulotingis plicata* (Champion)

latter); eye about one-third as wide as interocular space; bucculae short, not reaching apex of clypeus; labium extending onto apical half of mesosternum; antennae slender, cylindrical, all segments with long, slender bristles, segment I nearly or quite as long as interocular width, about three times as long as II, III slightly longer than I plus II, about one and a half times as long as IV.

Pronotum without inflated cysts; anterior margin convexly projecting almost to apex of head; median carina low, with a single row of small cells; lateral carinae reaching to calli, weak, lower than median carina, with cells obscure or absent; paranotum anterolaterally expanded obliquely, attaining a line across apex of head, lateral margins concavely converging posteriorly, terminating just posterior to humeral angles, anteriorly with long marginal bristles; posterior pronotal projection acute with apex narrowly rounded, extending to basal third of discoidal area.

Elytra conjointly nearly flat, multiseriate subcostal area oblique; outer margins, except basal half of sutural margin, with a row of numerous close-set, long tapering bristles; discoidal area reaching almost to midlength of elytron; costal margins strongly convex basally, extending distinctly cephalad of elytral articulation, thence straight and nearly parallel; costal area broad, horizontal, with 5-7 irregular rows of cells at widest point, surface transversely weakly depressed at basal fourth and midlength; sutural areas narrowly overlapping, leaving rounded apices widely separated; hypocostal lamina uniseriate, more or less remote from sides of abdomen.

Peritreme absent. Metapleural flange reduced, not expanded. Sternal laminae widely separated, strongly diverging on mesosternum, more widely separated and strongly outbowed on metasternum where their posterior apices are connected by a weak transverse carina. Abdomen convex basoventrally.

Type of genus: *Pleseobyrsa plicata* Champion, here designated.

Geographical distribution: The genus occurs in Tropical America from Costa Rica south to Brazil.

Comments: This genus admittedly is quite close to *Aristobyrsa* on a number of significant features, such as the long hairs of the antennae; the basal part of the costal area projecting convexly cephalad of the elytral articulation; the wide, anteriorly projecting paranotum; and the broad, coarsely lacy, diverging elytra. But two elytral features separate them. *Aristobyrsa* has the discoidal area very strongly, tumidly elevated and tilted outward to overhang the subcostal area, while *Stragulotingis* has the discoidal area low and flat. In addition, *Aristobyrsa* has the subcostal area vertical, much narrowed, subcoriaceous, with the veins much thickened and the included two rows of cells punctiform, while the subcosta on the two species of *Stragulotingis* is four to six cells wide with the veins and cells developed similarly to those of the discoidal area.

The prefix of the new name is from the Latin "stragulus" implying a spreading out and refers to the wide paranota and costal areas which expand anteriorly as well as laterally.

The two species included here were listed under the genus *Pleseobrysa* in the Drake and Ruhoff (1965a) catalog.

List of species of *Stragulotingis*

atratarsis (Drake and Hambleton), n. comb.

Pleseobrysa atratarsis Drake and Hambleton 1946b, p.124. *Peru plicata* (Champion), n. comb.

Leptobyrsa plicata Champion 1897, p. 26. Panama.

Pleseobrysa parana Drake and Hambleton 1944a, p. 95 [synonymy Drake and Ruhoff 1965a, p. 343]. Brazil.

Key to species of *Stragulotingis*

A. Tarsi black; size larger, length 3.6-3.7 mm. *atratarsis* (Drake and Hambleton).

Tarsi yellow to tan; size smaller, length 3.0-3.2 mm. *plicata* (Champion)

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